

61369-2-PCT

PCT

WORLD INTELLECTUAL PROPERTY ORGANIZATION
International Bureau



INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

<p>(51) International Patent Classification⁶ : C12N 15/53, 15/55, 15/60, C12P 7/18, C12N 9/04, 9/16, 9/88</p>	<p>A2</p>	<p>(11) International Publication Number: WO 98/21341 (43) International Publication Date: 22 May 1998 (22.05.98)</p>
<p>(21) International Application Number: PCT/US97/20873 (22) International Filing Date: 13 November 1997 (13.11.97) (30) Priority Data: 60/030,601 13 November 1996 (13.11.96) US (71) Applicant (for all designated States except US): GENENCOR INTERNATIONAL, INC. [US/US]; 4 Cambridge Place, 1870 South Winton Road, Rochester, NY 14618 (US). (72) Inventors; and (75) Inventors/Applicants (for US only): DUNN-COLEMAN, Nigel, S. [GB/US]; 142 Johnson Avenue, Los Gatos, CA 95032 (US). DIAZ-TORRES, Maria [ES/US]; 58 North El Camino Real, San Mateo, CA 94401 (US). CHASE, Matthew, W. [US/US]; 2211-27 Hastings Drive, Belmont, CA 94002 (US). TRIMBUR, Donald [US/US]; 349 Orchard Avenue, Redwood City, CA 94601 (US). (74) Agent: GLAISTER, Debra, J.; Genencor International, Inc., Page Mill Road, Palo Alto, CA 94304-1013 (US).</p>		<p>(81) Designated States: AL, AM, AT, AU, AZ, BB, BG, BR, BY, CA, CH, CN, CZ, DE, DK, EE, ES, FI, GB, GE, HU, IS, JP, KE, KG, KP, KR, KZ, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, TJ, TM, TR, TT, UA, UG, US, UZ, VN, ARIPO patent (GH, KE, LS, MW, SD, SZ, UG, ZW), Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European patent (AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN, TD, TG). Published Without international search report and to be republished upon receipt of that report.</p>

(54) Title: METHOD FOR THE RECOMBINANT PRODUCTION OF 1,3-PROPANEDIOL

(57) Abstract

The present invention provides an improved method for the production of 1,3-propanediol from a variety of carbon sources is an organism comprising DNA encoding protein X of a dehydratase or protein X in combination with at least one of protein 1, protein 2 and protein 3. The protein X may be isolated from a diol dehydratase or a glycerol dehydratase. The present invention also provides host cells comprising protein X that are capable of increased production of 1,3-propanediol.